

Appl.No. 10/042,626
 Amdt. Dated February 16, 2005
 Reply to office action of Dec.08,2004



Table 1 (Parts Name to Fig.1. .)

- 1 CYCLO ID-GEAR HOUSING
- 2 CYCLO OD-GEAR DISK
- 3 ECCENTRIC 0+120+240deg. HOLLOW SHAFT
- 4 DRIVE-THROUGH HOLLOW FLANGE
- 5 CONTAINING FLANGE
- 6 BEARING RETAINER
- 7 PLANET GEARS
- 8 PLANET SUN GEAR
- 9 SUN GEAR HOLLOW AXIS
- 10 BEARING CYCLO AXIS
- 11 ECCENTRIC BEARING
- 12 BEARING SUN GEAR SHAFT
- 13 SNAP RING PLANET GEAR
- 14 SNAP RING FLANGE
- 15 SEAL X-TYPE
- 16 SNAP RING CENTER OF HOUSING

Fig. 1.1.

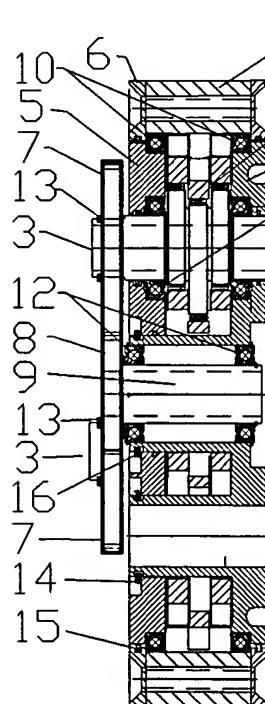
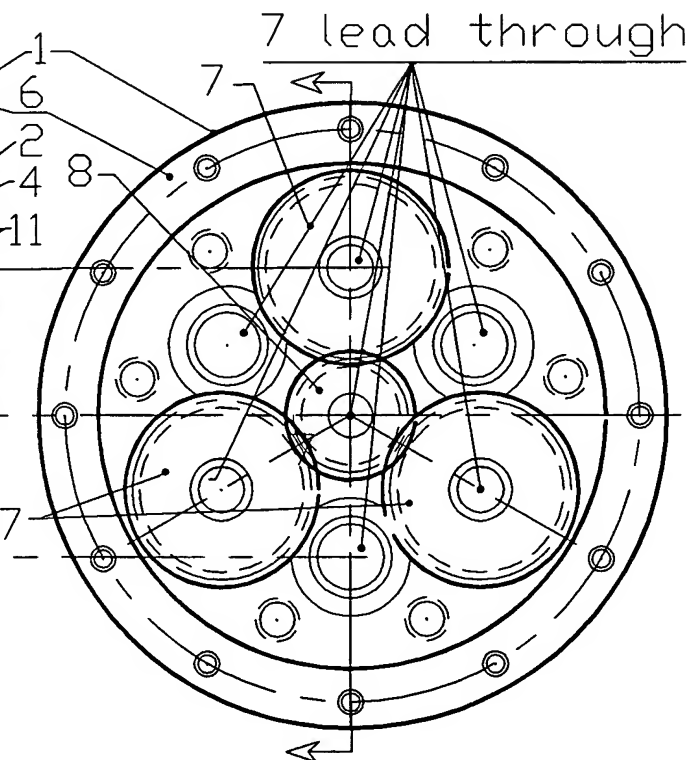


Fig. 1.2.



Appl.No. 10/042,626

Amdt. Dated February 16, 2005

Reply to office action of Dec.08,2004

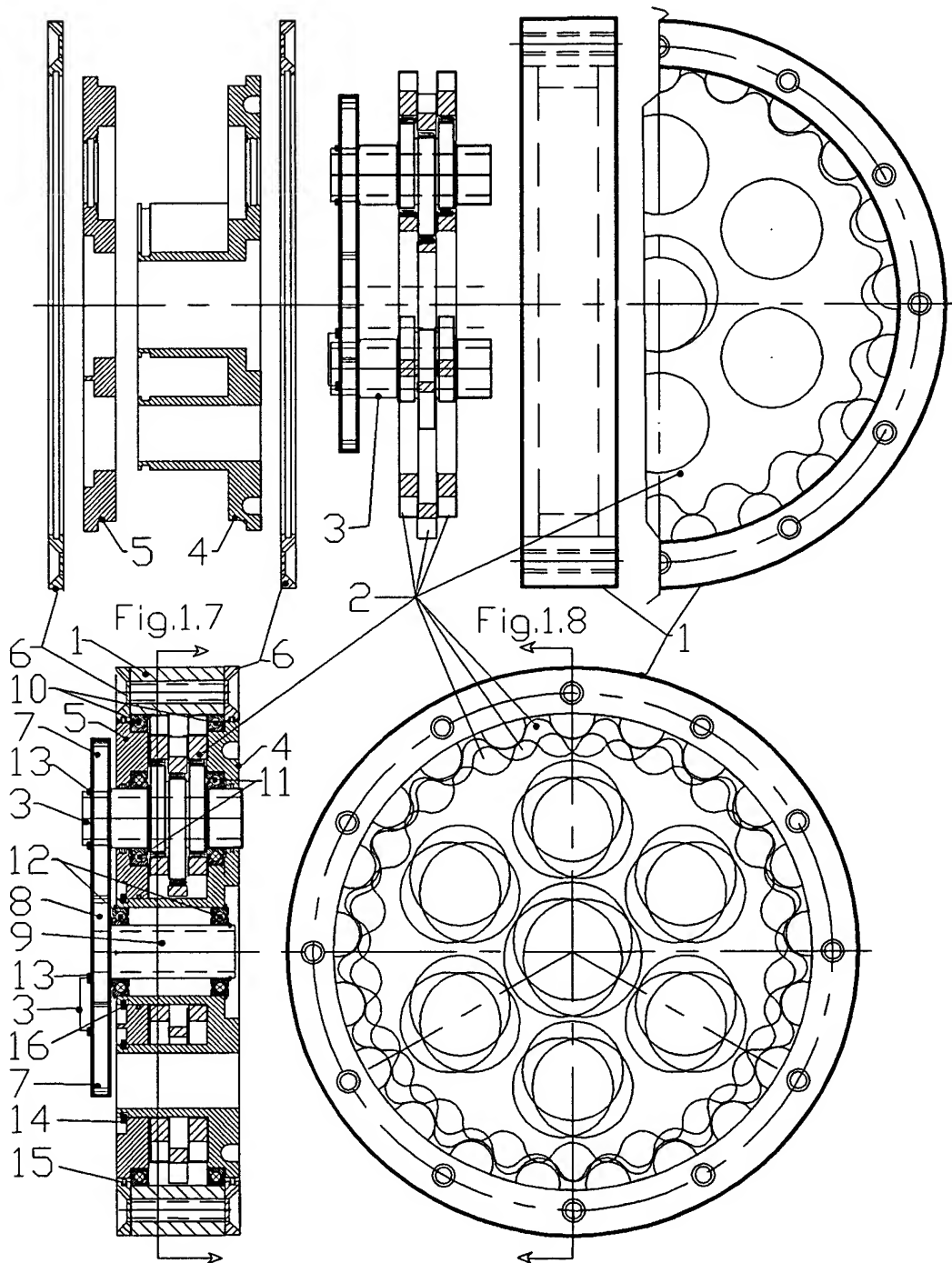


Fig.1.3

Fig.1.4

Fig.1.5

Fig.1.6



Appl.No. 10/042,626

Amdt. Dated February 16, 2005

Reply to office action of Dec.08,2004



Table 2 (Cyclo Gear Relations and Symbols)

R = radius of cyclo tooth
 r = r of Arc $\tan(R D_2 R)$
 D = diameter at tooth centers
 \square = offset of eccentrics
 $Z1$ = number of cyclo gear teeth
 $Z2$ = number of cyclo disk teeth

Relations:

$$Z2 = Z1 - 1$$

$$D1 = Z1 \times R$$

$$D2 = Z2 \times R$$

$$\square = R/2$$

$$e = \text{Ecc. Index} = 360\text{deg} / \text{No of Cyclo Disks}$$

Fig.1.9

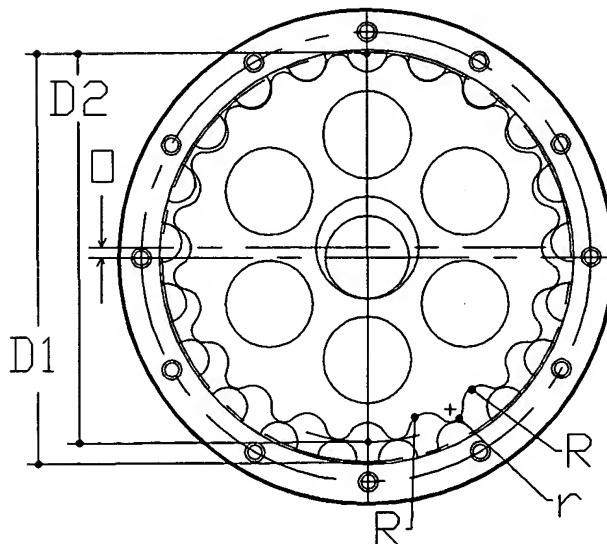
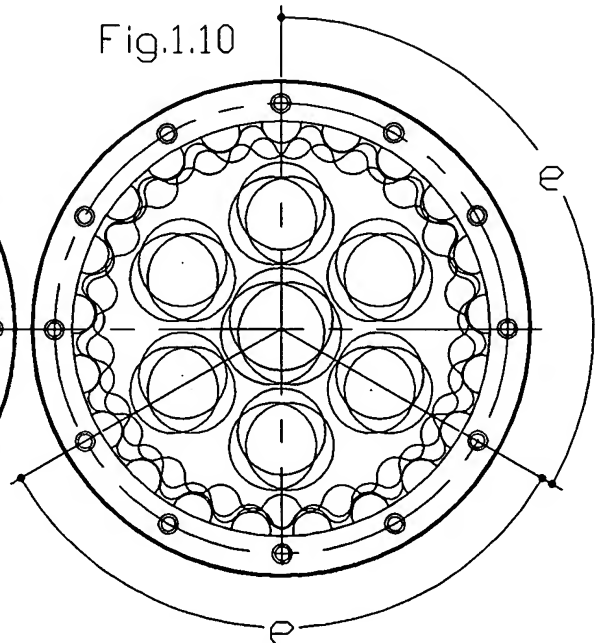


Fig.1.10



Appl.No. 10/042,626
 Amdt. Dated February 16, 2005
 Reply to office action of Dec. 08, 2004

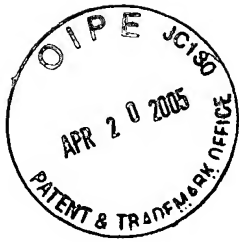
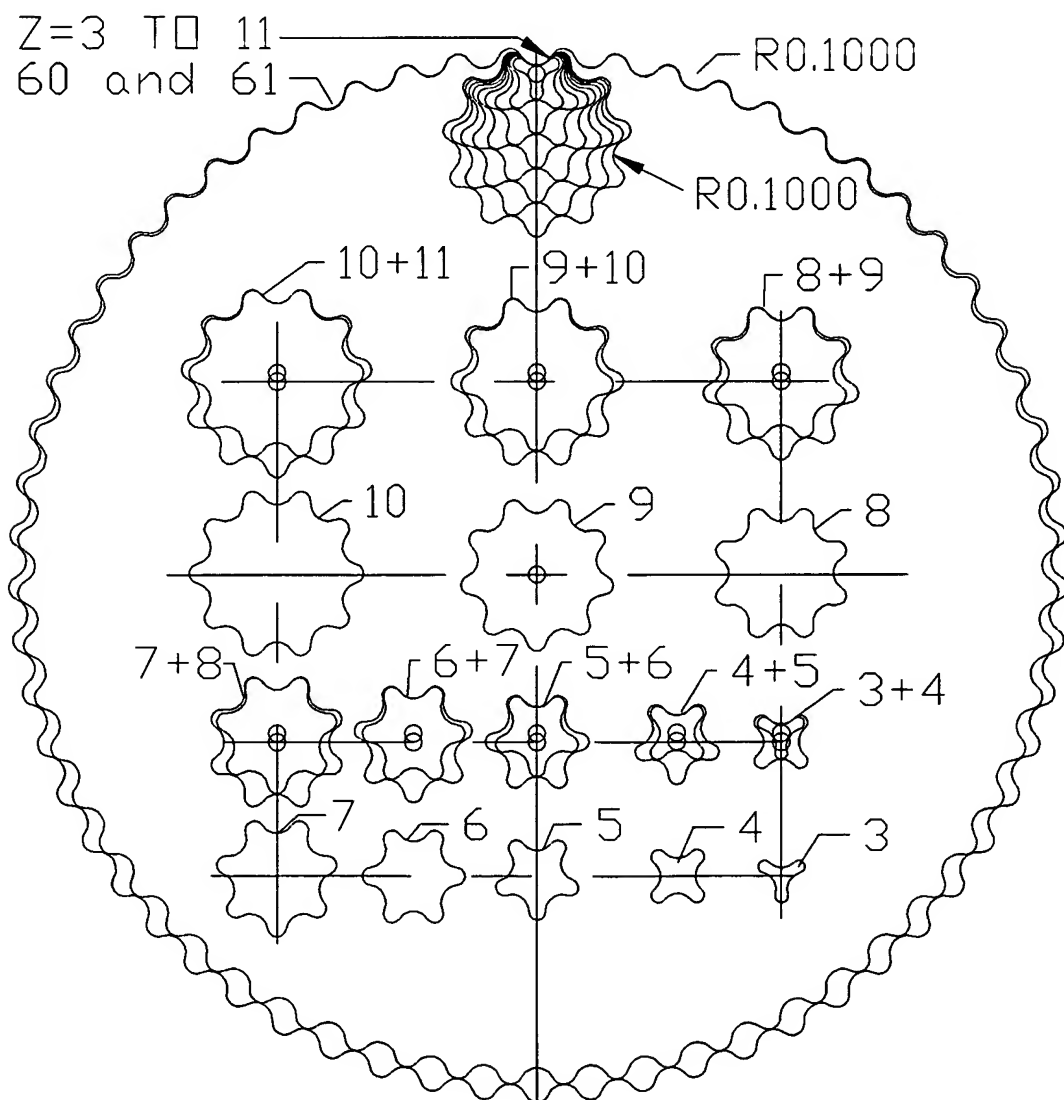


TABLE 3

Sample Cyclo Gear Relations from
 3 to 11 and 60 and 61 Cyclo Teeth

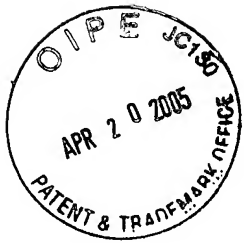
Fig. 1.11



Appl.No. 10/042,626

Amdt. Dated February 16, 2005

Reply to office action of Dec. 08, 2004



SCALE 1/2

Fig.1.12

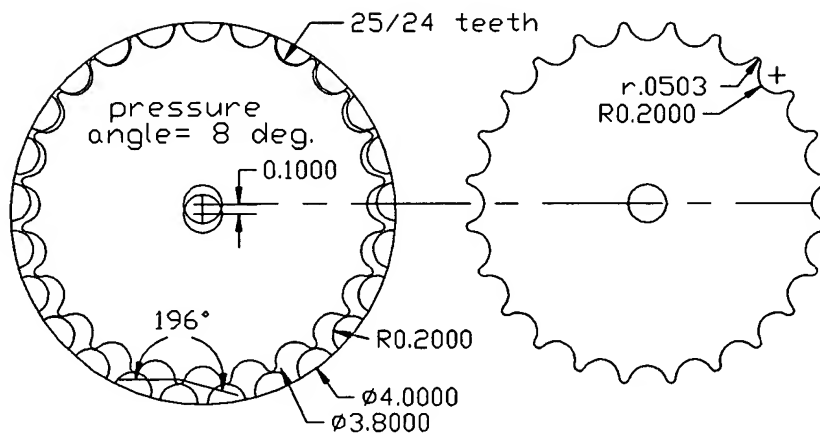


Fig.1.13

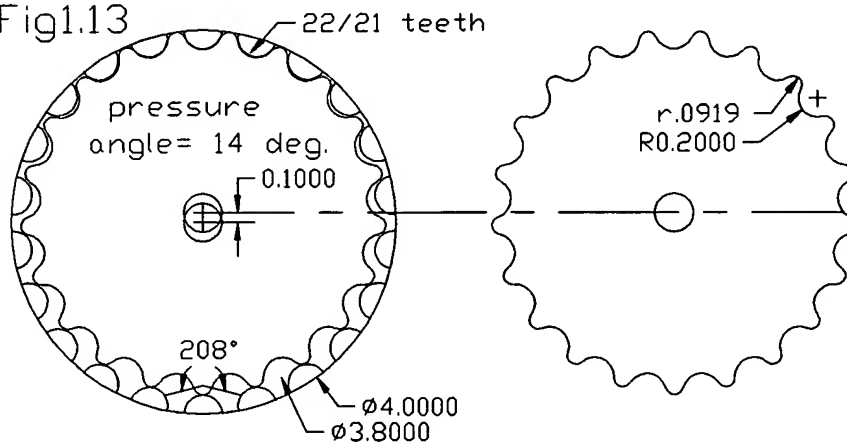
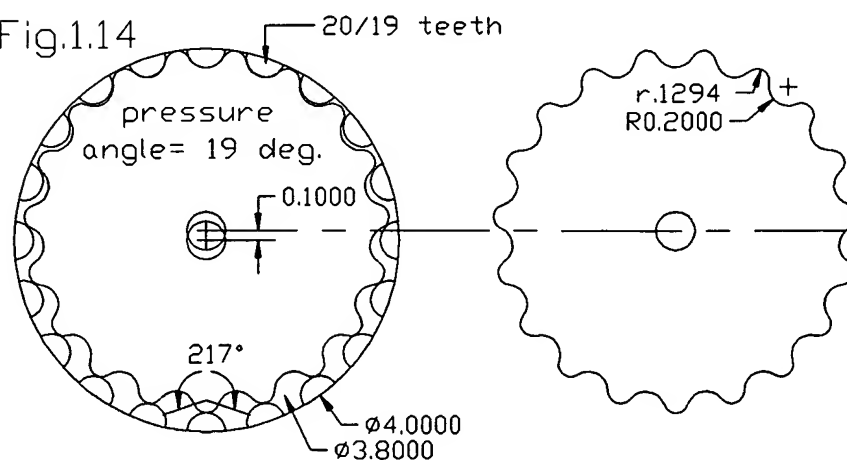
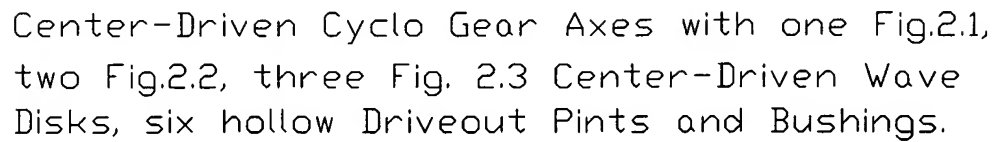


Fig.1.14



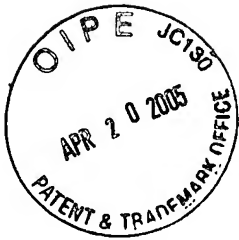
Reply to office action of Dec.08,2004



To Fig.2. . Part
Names

3.12 Drive Flange.

3 Disks
3.2
3.9
3.6



Appl.No. 10/042,626
Amdt. Dated February 16, 2005
Reply to office action of Dec.08,2004

Fig. 3

FREQUENCY SHIFT AND SERVO
FILTER TO CONTROL CRITICAL
FREQUENCY VIBRATION

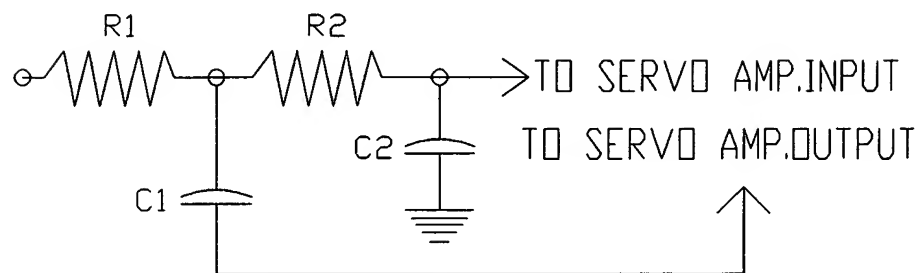
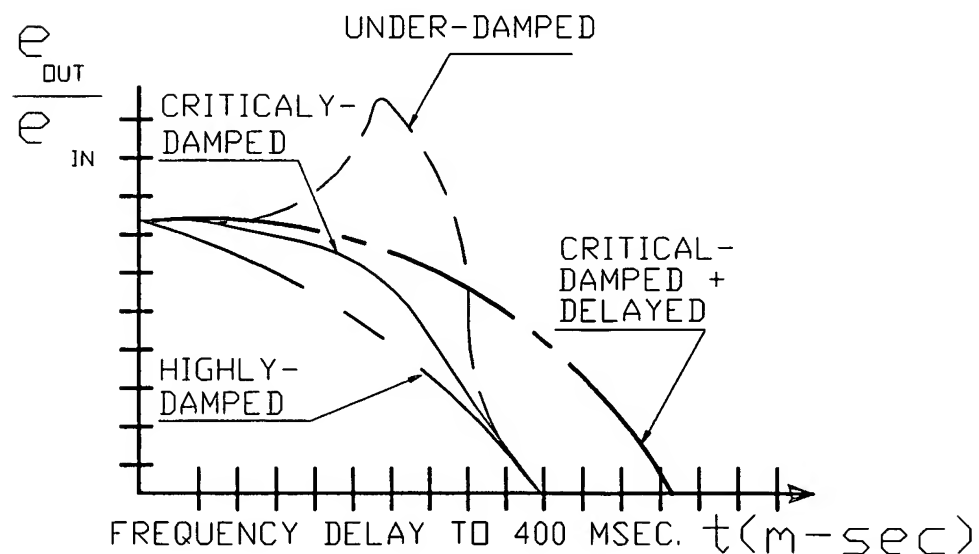


Fig. 4





Appl.No. 10/042,626

Amdt. Dated February 16, 2005

Reply to office action of Dec.08,2004

Fig. 5

ONE DISK ABSOLUTE ANGULAR ROTATION ENCODER USING
LOW-POWER INFRARED LED, TTL UP/DOWN COUNTER WITH
SHIFT REGISTER AND LOCAL RECHARGEABLE BATTERY POWER BACKUP

